

IN THE CLAIMS:

Please amend claims 1, 7-9, 15-17, and 19 as follows:

1. (Twice Amended) A semiconductor structure comprising:

an electrically conductive interconnect disposed within a first dielectric layer, said electrically conductive interconnect having an upper surface;

a passivation layer disposed upon said upper surface, said passivation layer comprising ammonia and derivatives thereof adsorbed upon said upper surface; and

an interlayer dielectric disposed upon said first dielectric layer and upon said upper surface, said interlayer dielectric being continuously adhered to said upper surface.

7. (Twice Amended) A semiconductor structure comprising:

an electrically conductive interconnect having an upper surface and being disposed within a dielectric layer, said electrically conductive interconnect including:

a titanium liner layer disposed within a depression in said dielectric layer;

a titanium nitride layer disposed upon said titanium liner layer; and

a tungsten film disposed upon said titanium nitride layer and filling said depression;

a first passivation layer comprising a tungsten nitride compound and being disposed upon said upper surface;

a second passivation layer comprising ammonia and derivatives thereof adsorbed upon said first passivation layer; and

an interlayer dielectric disposed upon said dielectric layer and upon said upper surface, said interlayer dielectric being continuously adhered to said upper surface.

8. (Twice Amended) A semiconductor structure comprising:

an electrically conductive interconnect disposed within a dielectric layer, said electrically conductive interconnect having an upper surface and including:

a titanium liner layer disposed within a depression in said dielectric layer;

a titanium nitride layer disposed upon said titanium liner layer; and

a tungsten film disposed upon said titanium nitride layer and filling said depression;

a passivation layer disposed upon said upper surface comprising ammonia and derivatives thereof adsorbed upon said upper surface; and

an interlayer dielectric disposed upon said dielectric layer and upon said upper surface, said interlayer dielectric being continuously adhered to said upper surface.

9. (Twice Amended) An interconnect in an electronic device comprising:

a metallic first structure disposed within a first silicon oxide layer, said metallic first structure having an upper surface;

a passivation layer disposed upon said upper surface, said passivation layer comprising ammonia and derivatives thereof adsorbed upon said upper surface; and

a second silicon oxide layer disposed upon said first silicon oxide layer and upon said upper surface, said second silicon oxide layer being continuously adhered to said upper surface.

15. (Twice Amended) An interconnect in an electronic device comprising:

a metallic structure disposed within a first silicon oxide layer, said metallic structure having an upper surface and including:

a titanium liner layer disposed within an interconnect corridor in said first silicon oxide layer;

a titanium nitride layer disposed upon said titanium liner layer; and

a tungsten film disposed upon said titanium nitride layer;

a first passivation layer disposed upon said upper surface and comprised of a tungsten nitride compound;

a second layer comprising ammonia and derivatives thereof adsorbed upon said first passivation layer; and

a second silicon oxide layer disposed upon said first silicon oxide layer and upon said upper surface, said second silicon oxide layer being continuously adhered to said upper surface.

16. (Twice Amended) An interconnect in an electronic device comprising:

a metallic structure disposed within a first silicon oxide layer, said metallic structure having an upper surface and including:

a titanium liner layer disposed within an interconnect corridor in said first silicon oxide layer;

a titanium nitride layer disposed upon said titanium liner layer; and

a tungsten film disposed upon said titanium nitride layer;

a passivation layer disposed upon said upper surface and comprised of ammonia and derivatives thereof adsorbed upon said upper surface; and

a second silicon oxide layer disposed upon said first silicon oxide layer and upon said upper surface, said second silicon oxide layer being continuously adhered to said upper surface.

17. (Once Amended) A semiconductor structure comprising:

an electrically conductive interconnect disposed within a first dielectric layer, said electrically conductive interconnect having an upper surface;

a first passivation layer disposed upon said upper surface, said first passivation layer comprising a tungsten nitride compound;

a second passivation layer adsorbed upon said first passivation layer, said second passivation layer comprising ammonia and derivatives thereof; and

an interlayer dielectric disposed upon said first dielectric layer and upon said upper surface, said interlayer dielectric being continuously adhered to said upper surface.

19. (Once Amended) An interconnect in an electronic device comprising:

a metallic first structure disposed within a first silicon oxide layer, said metallic first structure having an upper surface;

a first passivation layer disposed upon said upper surface, said first passivation layer comprising a tungsten nitride compound;

a second layer adsorbed upon said first passivation layer, said second layer comprising ammonia and derivatives thereof; and

KL  
a second silicon oxide layer disposed upon said first silicon oxide layer and upon said upper surface, said second silicon oxide layer being continuously adhered to said upper surface.

Please add the following new claims:

29. A semiconductor structure comprising:

an electrically conductive interconnect disposed within a first dielectric layer, said electrically conductive interconnect having an upper surface;

a passivation layer disposed upon said upper surface, said passivation layer comprising a nitrogen-containing silane adsorbed upon said upper surface; and

B7  
an interlayer dielectric disposed upon said first dielectric layer and upon said upper surface, said interlayer dielectric being continuously adhered to said upper surface.

30. A semiconductor structure comprising:

an electrically conductive interconnect disposed within a first dielectric layer, said electrically conductive interconnect having an upper surface;

a first passivation layer disposed upon said upper surface, said first passivation layer comprising a tungsten nitride compound;

a second passivation layer adsorbed upon said first passivation layer, said second passivation layer comprising a nitrogen-containing silane; and

an interlayer dielectric disposed upon said first dielectric layer and upon said upper surface, said interlayer dielectric being continuously adhered to said upper surface.